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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SINGH, DALIP K	
ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/913,487	BAUMGARTEN ET AL.	
	Examiner	Art Unit	
	Dalip K. Singh	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-21,23-27 and 30-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-21,23-27 and 30-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to applicant's Request for Continued Examination (RCE) dated November 15, 2005 in response to PTO Office Action dated June 15, 2005. The amendments to claim(s) 17-21; the deletion of claim(s) 16, 22, 28 and 29; and the addition of claim(s) 30-33 have been noted and entered in the record, and applicant's remarks have been carefully considered resulting in the action as set forth herein below.

2. Applicant's arguments with respect to applicability of US 4,553,206 to Smutek et al. in November 8, 2004 Office action and the examiner interview held on November 10, 2005 have been carefully considered. Applicant has responded that there is no suggestion in Smutek et al. that the index is generated "based on the at least one parameter" or using a "predetermined process having at least one parameter which determines the index and how the original digital image is modified to obtain the modified digital image". Examiner disagrees. Smutek et al. **discloses** index generation based on that at least one parameter and is detailed in the below rejections of this Office Action (...as may be seen in Fig. 2, a universal storage element has five basic components...col. 5, lines 29-67;...the system creates an Index Header shown in Fig. 3...col. 6, lines 5-43;...also the system creates an index, shown in Fig. 4...col. 6, lines 19-30).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 19 recites the limitation "said referencing" in line 2. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 19 recites the limitation "mapping object" in line 3. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 20 recites the limitation "said referencing" in line 2. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 20 recites the limitation "mapping object" in line 2. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 21 recites the limitation "mapping object" in line 2. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 23 recites the limitation "mapping object" in line 2. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 24 recites the limitation "mapping object" in line 3. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 25 recites the limitation "mapping object" in line 2. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 26 recites the limitation "mapping object" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

13. With respect to claims 19-21, and 23-26, it appears that the limitation "mapping object" and "said referencing" has been inadvertently left out, as it was present in the original claims. The Office Action would thus be generated based on the original claims as if this omission was typographical in nature, with "mapping object" being the compressed image data. There is no mention of "mapping object" in the specification.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 17-21, 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,553,206 to Smutek et al.

a. Regarding claim 30, Smutek et al. **discloses** images that have been compressed for storage and subsequent retrieval and has index information associated therewith about the image such as its original size, its compressed size and the coding method. To understand how Smutek et al. further **discloses** that an original digital image is to be modified by a predefined process to at least one of transform and convert the original digital image, the predefined process having at least one parameter which determines how the original digital image is to be modified, reference is made to Smutek's Fig. 2, 3 and 4. Fig. 2 **discloses** a universal storage element with block segments that details a Common Key Length, Key Length, Key, Data length, Data. Fig. 3 **discloses** index header indicates how an image is scanned, encoded, etcetera. Fig. 4 shows the system created Index. The Index identifies that the information is for an image or text, identifies the particular image or text and stores index data identifying the blocks of memory in which the compressed image or text information is actually stored. Thus, Fig. 2, 3 and 4 detailing the universal storage element, Index Header and Index work in tandem to provide for modification of image by a predefined process. Smutek et al. **discloses** universal storage element storing information that details image encoding information "DATA 25" which shows up as Encoding Scheme section 37 in Fig. 3 which is the predefined process of transform and convert the original image data. Smutek et al. **discloses** the system creating an Index Header shown in Fig. 3 which stores how image is scanned, encoded etcetera and Fig. 4 shows an Index that identifies this compressed image data in the memory block. Thus, Fig. 2, 3 and 4 blocks i.e., universal storage element, index header and index work in tandem in determining an index for accessing the pre-stored modified images, and retrieving a modified digital image using the index,

when the modified digital image is previously stored in a memory at the index. (...as may be seen in Fig. 2, a universal storage element has five basic components...col. 5, lines 29-67;...the system creates an Index Header shown in Fig. 3...col. 6, lines 5-43;...also the system creates an index, shown in Fig. 4...col. 6, lines 19-30).

b. Regarding claim 31, it is similar in scope to claim 30 above and is rejected under the same rationale.

c. Regarding claim 32, Smutek et al. **discloses** a memory (bulk memory 12, Fig. 1) and a processor (microprocessor 11, Fig. 1); and rest of the claim limitation is similar in scope to claim 30 above and is rejected under the same rationale.

d. Regarding claim 33, Smutek et al. **discloses** a processor (microprocessor 11, Fig. 1) and rest of the claim limitation is similar in scope to claim 30 above and is rejected under the same rationale.

e. Regarding claim 17, Smutek et al. **discloses** scanning, digitization and compressing of image data (...each image that is scanned, digitized and compressed for storage and subsequent retrieval...col. 2, lines 63-67; col. 3, lines 1-3).

f. Regarding claim 18, Smutek et al. **discloses** system creating an index header. As described above, creating an index header is in tandem with index creating as well as the universal storage element creation; and this index header identifies the data as being image or text, identifies the particular image or text, and stores a variety of information concerning how the image or text is scanned and/or encoded (col. 6, lines 13-26).

g. Regarding claims 19 and 20, Smutek et al. **discloses** accessing the index for the mapping object (image or text that has been compressed and stored in memory) in the blocks of memory (..the index identifies that information to be stored is for an image or text, identifies the particular image or text, and stores index data identifying the blocks

of memory in which the compressed image or text information is actually stored...col. 6, lines 20-30).

h. Regarding claim 21, Smutek et al. **discloses** image data compressing and storage in the memory (...the data is then compressed to reduce the required storage space...then stored in the blocks...col. 6, lines 9-12).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,553,206 to Smutek et al. in view of US 5,717,912 to Millett et al.

a. Regarding claim 23, Smutek et al. **does not disclose** wherein a plurality of processes are used for one of determining indices and determining the new mapping object from the predefined digital image. Smutek et al. generically **discloses** compression without giving any indication of plurality of processes for doing such. Millett et al. **discloses** compressing techniques for document indexing and data retrieval (Abstract). Further, Millett et al. **discloses** plurality of compression technique such as run length encoding, bit string fragment encoding, delta encoding and absolute element reference (col. 11, lines 25-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time invention was made to modify the device as taught by Smutek et al. with the feature "plurality of processes of compression for one of determining indices" as taught by Millett et al. **because** it results in overall greater

compression than when only a single process of compression is utilized resulting in memory conservation.

a. Regarding claim 24, Smutek et al. **discloses** wherein the mapping object (stored image or a body of text) is accessed if the at least one parameter corresponds, within a predefined tolerance, to at least one stored parameter of the mapping object (stored image or a body of text)(...to display a stored image, the Index header is identified...assume it is desired to display the image titled WANG. The Common Length of Key Block segment of the Index Header indicates that there are three characters common with the identity of the previous image stored in the file...upon reading the fourth block segment of the Index Header, a byte is found therein representing the letter G, and the letter G is combined with the Common Key Length characters WAN read out of the previous file to recreate the proper image identity WANG...col. 9, lines 25-40).

b. Regarding claim 25, Smutek et al. **discloses** wherein the mapping object includes information (...universal storage element has five basic components; index header...indicates variety of information...;...index identifies information...col. 5, lines 29-33; col. 5, lines 58-61; col. 6, lines 20-25).

c. Regarding claim 26, Smutek et al. **discloses** wherein the mapping object includes another digital image (...present invention...stores images...col. 2, lines 53-55).

d. Regarding claim 27, Smutek et al. **discloses** wherein the at least one parameter is a specific variable for influencing image data of the predefined digital image (...in the index header of Fig. 3 it indicates a variety of information...about how an image is encoded...col. 5, lines 55-60).

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Dalip K. Singh** whose telephone number is **(571) 272-7792**. The examiner can normally be reached on Mon-Friday (10:00AM-6: 30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ulka Chauhan**, can be reached at **(571) 272-7782**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Please note that the new Central Official FAX number for application specific communications with the USPTO is **571-273-8300** (effective July 15, 2005).

Dalip K. Singh

Examiner, Art Unit 2628

dks

April 10, 2006

Kee M. Tung
Primary Examiner